Amendments to the Specification

Please make the following amendment to the specification to correct obvious errors.

At page 9, line 11 of the specification, please add the following replacement paragraph:

Applicant noticed however that in prior art furnaces no attention is paid to effectively controlling the flow direction of the conditioning gas inside the furnace. According ~~Acording~~ to prior art, (see e.g. US 4,154,592, col. 3, lines 50-54 and US 5,284,499, col. 5, lines 26-33) the gas is in fact introduced into the furnace from its upper end in a direction substantially perpendicular with respect to the preform longitudinal axis and simply allowed to diffuse towards the bottom end, the top end of the furnace being sealed. Other furnaces are known (see, for instance, Japanese patent application (Kokai) no. 01-192741 or GB 2,212,151), having an inlet duct of conditioning gas inclined towards the axis of the preform; as shown in the relevant figures of the above cited documents, said inclination of the inlet ducts is of about 45° with respect to the preform axis. However, notwithstanding said inlet inclination, the gas exiting from the duct is divided into upper and lower flows, as mentioned in the above cited JP Kokai 01-192741, the upper ~~uper~~ flow of gas acting as a gas seal for sealing the upper end of the furnace.

At page 12, line 1 of the specification, please add the following replacement paragraph:

A method and a furnace according to the present invention allows drawing preforms of larger diameter than conventional ones, therefore reducing the number of times that the furnace must be shut down to insert a new preform and increasing the amount of drawn fiber from a single preform, eventually reducing the costs of the drawing process.

At page 19, line 6 of the specification, please add the following replacement paragraph:

A preferred embodiment of a furnace according to the invention is illustrated in FIG. 2, which is a detailed cross-sectional view on a plane through a diameter of the furnace. The furnace body F comprises a cylindrical susceptor 2 housed within the interior of a cylindrical insulator 3. Insulator 3 is in turn preferably housed inside a cylindrical quartz beaker 4. Two annular quartz plates 25 and 27 maintain the alignment of quartz beaker 4 around susceptor 2[[ ]]. A clearance, preferably of about 3-5 mm, is preferably provided between the outer surface of susceptor 2 and the inner surface of insulator 3. A similar clearance is also provided between outer surface of insulator 3 and inner surface <u>of</u> quartz beaker 4. The provision of these clearances allows an easier mounting of the assembly of the furnace body and easy removal and substitution of the single components of it, without interfering with the other components of the assembly.

At page 20, line 14 of the specification, please add the following replacement paragraph:

In the embodiment illustrated in FIGS. 1 and 2, housing 1 includes two walls, exterior wall 1a and interior wall 1b, which together define an annular cooling cavity 12. In the embodiment shown, external wall ~~1b~~ 1a has an outside diameter of 620 mm ~~in diameter~~, and internal wall ~~1a~~ 1b has an outside diameter of 580 mm. The height of housing 1 is about 740 mm. To cool external housing 1, a cooling fluid flows through cooling cavity 12. For instance, the space between walls 1a and 1b is cooled by a flow of water. Cooling water enters cavity 12 via a plurality of water supply pipes 11. For example, three supply pipes 11 may be distributed around the perimeter of housing 1 at 120° intervals. Water is then discharged from cavity 12 through discharge pipes 13. Preferably, the numbers of supply pipes 11 and discharge pipes 13 are equal and supply pipes 11 and discharge pipes 13 are located on opposing sides of housing 1 so that cooling water uniformly cools housing 1.

At page 30, line 3 of the specification, please add the following replacement paragraph:

After the conditioning gas has passed through optional filter 106, distribution ring 107 smoothly diverts its flow. The conical lower surface of distribution ring, together with distribution casing bottom 104, forms a downward-angled annular channel 110 through which the conditioning gas flows along paths 150. Thus, the flow of conditioning gas turns downward toward muffle 33. In order to minimize turbulence in the flow of conditioning gas, the applicant has observed that annular channel 110 should be angled of an angle α of ~~at least~~about 45° with respect to the longitudinal axis of the furnace, preferably of from about 40° C to about 20°, an angle α of about 30° being particularly preferred. If angle α is higher than about 45°, the flow of gas would

not be sufficiently downward directed, thus possibly causing, in particular at high flow rates, undesirable gas turbulence due to an excessively high radial component of the gas flow entering the top chimney. On the other side, an angle of 0° (i.e. with an axial flow of gas, i.e. parallel to the longitudinal axis of the furnace) would be desirable as regards to the kinetic of the process, but difficult to realize in terms of apparatus, as in this case the distributor body should have a reduced cross section with respect to the remaining portion of the top chimney.

At page 32, line 26 of the specification, please add the following replacement paragraph:

Seal 114 is designed to exert sufficient sealing force onto mother rod 35 or preform 32 to prevent the ambient atmosphere from entering chamber 122. However, seal 114 is more resilient in the radial direction than conventional seals so that mother rod 35 or preform 32 may be smoothly withdrawn from support body 38 without sticking between mother rod 35 or preform 32 and seal 114. The added resilience of seal 114 is achieved by adopting a seal with a Y-shaped profile, as shown in fig. 7, where seat 115 forming the Y-shaped profile in seal 114 is deeper than in conventional seals. In particular, when the thickness of the seal walls 116 is about 1 mm, the ratio of the total seal height H1 to the seat height H2 ~~to the total seal height H1~~ is less than about 2:1, preferably from about 2:1 to about 1.4:1. In the depicted embodiment, thickness of the walls of seal 114 is about 1 mm, the seal has a total height of about 10 mm and a height of about 5.8 mm from the seat ~~155~~ 115 to the bottom of the seal. Said seal is made of an inert elastomeric material resistant to the high temperature of the furnace. Preferably a fluoroelastomer, such as Viton®, is employed.